EA

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,012	01/25/2002	Hiroaki Saeki	33082R116	1344

7590 06/15/2005

Smith Gambrell & Russell
Beveridge DeGrandi Weilacher & Young
Intellectual Property Group Suite 800
1850 M Street NW
Washington, DC 20036

EXAMINER	
BRAHAN, THOMAS J	

ART UNIT	PAPER NUMBER
3652	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/048,012	SAEKI ET AL.	
	Examiner	Art Unit	
	Thomas J. Brahan	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6 and 7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6 and 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.

2. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In the last line of claim 1, the term "the load port" lacks antecedent basis within the claims.

b. Claim 7 is indefinite as being drawn to a different invention from the invention of the claim from which it depends. Current Office policy discourages hybrid claims. Upon the determination of allowable subject matter, the preamble of claim 1 could be changed to indicate a "combination" "apparatus", or "system" instead of a "transfer system" and the preamble of claim 7 can be changed to correspond to the new preamble of claim 1. Alternatively, claim 7 could be rewritten to include all the limitations of claim 1.

3. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

> This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

4. Claims 1 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendrickson et al in view of Van Doren et al. Figures 2 and 3 of Hendrickson et al show the basic claimed transfer system for transferring an object (a wafer) to be processed out of a carrier (cassette 73) which is provided on a top face of a load port unit (72) and for transferring the object to the carrier, the system comprising:

a system body having a bottom, a front wall vertical with respect to the bottom, and a guide rail (adjacent car 74) provided as to extend in lateral directions of the system body;

a transfer robot (76) which is capable of linearly reciprocating along the guide rail;

wherein both the load port unit (72) and the guide rail are mounted on the front wall of the system body, the load port unit is mounted on the outside of the front wall of the system body and the guide rail is mounted on inside of the front wall of the system body, and

the transfer robot (76) transfers the object from and to the carrier positioned on the top face of the load port unit.

Hendrickson et al varies from claim 1 by not specifying that the transfer robot (76) is moved by a linear motor. Van Doren et al shows a similar robot transfer system comprising:

a system body having a vertical wall with a guide rail (152) provided as to extend in lateral directions of the system body;

a linear motor having a secondary side (154) provided as to extend in lateral directions of the system body and a primary side (156) movable to the secondary side; and

a transfer robot (10) which is mounted on the primary side of the linear motor and which is capable of linearly reciprocating along the guide rail (152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the transfer system of Hendrickson et al by having the robot (76) moved with a wall mounted linear motor, to accurately position the robot, as taught by Van Doren et al. Locating the secondary side (154) of the linear motor and its guide rail (152) on the front side of the system body would have been an obvious choice of design, within the limits of routine skill in the art at the time the invention was made by applicant. Hendrickson et al has processing means (54), as recited in claim 7.

5. Claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendrickson et al in view of Van Doren et al, as applied above to claim 1, and further in view of Akimoto et al. Hendrickson et al, as modified, shows the basic claimed transfer system, but varies from the claims by not showing a clean air system for the system body. Figure 3 of Akimoto et al shows a similar system with a transfer robot with a system body having upper and lower fan systems (64 and 67). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the system body of Hendrickson et al with a clean air supply system and an exhaust system, to eliminate particles in the body, as taught by Akimoto et al.

6. Claims 4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendrickson et al in view of Van Doren et al, as applied above to claim 1, and further in view of Teramachi or Sakino et al. Hendrickson et al, as modified, shows the basic claimed transfer system, but varies from the claims by not having a brake for the linear motor. Teramachi shows a similar linear motor positioning device with a brake (13) controlled by an electromagnetic coil (15) and opposing spring (16). Sakino et al shows a similar linear motor positioning system with brake controlled by leaf springs (108) and electromagnetic coil (126). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to provide the linear motor positioning drive or body of Hendrickson et al with brake system, for automatically locking the drive in place due to power loss or emergency actuation, as taught by Teramachi or as taught by Sakino et al.

7. Applicant's remarks in the amendment filed March 18, 2005, have been fully considered, but are deemed moot in view of the above new rejections. The amendment necessitated the new grounds, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Eileen Lillis, can be reached at (571) 272-6928. The fax number for all patent applications is (703) 872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJB 6/5/05

Thomas J. Brahan
Primary Examiner
Art Unit 3652